

<p>93-351577/44 L02 HUFR 92.04.11  HUELS TROISDORF AG  92.10.31 92DE-4236855 (+ 92DE-4212229) (93.10.29) C04B 28/00,  28/26 (C04B 14:10, 14:18, 18:08, 18:14, 28/00, 22:00, 18:10)  (C04B 14:18, 28/26, C06B 14:10)  Low density inorganic moulding prodn. - by wetting microporous  filler material with liq., water contg. wetting agent, mixing with  stone forming component, pouring into mould and thermally  hardening (Ger)  C93:156006 N(AT AU BB BG BR CA CH CZ DEDKES FIGB HU JP KP KR  KZ LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US VN) R(AT  BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE  Addnl. Data: HAACK T, RANDEL P  WILLICH DAEMWSTOFFE &amp; ISOLIERSYSTEME GMB (WILL-)  93.04.13 93WO-EP00900  93-328871/42</p>	<p>L(2-A4, 2-G1)  <b>USE/ADVANTAGE</b>  Making chimneys and chimney parts using steel tubular  moulds.  The moulding has a high temp. strength, good alternat-  ing temp. strength, low thermal conductivity and has low  shrinkage at high temperature.</p> <p><b>EMBODIMENTS</b>  The stone-forming component consists of: (1) a fine  oxide mixture of amorphous SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub>; and/or  (2) a glass-like, amorphous electrofilter ash; and/or  (3) ground calcined bauxite; and/or  (4) electrofilter ash from lignite coal fire power stations;  and/or  (5) undissolved, amorphous SiO<sub>2</sub>, esp. from an amorphous,  dispersed powder, dehydrated or hydrated silicic acid;  and/or  (6) meta kaolin.  The hardener is an alkali silicate solution with 1.2-3 mol  SiO<sub>2</sub> per mol K<sub>2</sub>O and/or Na<sub>2</sub>O and a density of 1.4-1.7  kg/dm<sup>3</sup>.</p>
<p>Method of producing a light, mainly inorganic moulding with  a density below 400 kg/m<sup>3</sup> consists of wetting a microporous  filler material of powder density below 150 kg/m<sup>3</sup> with a  liquid, water-containing wetting agent; mixing with a stone-  forming component and optionally other solid components  together with a liquid hardener so that the filler material  retains its macrostructure; pouring into a mould; and press  forming followed by removal and thermal hardening.</p>	<p>WO9321128-A+</p>

A surfactant and a turbidity agent may also be added to the mixture. The latter is pref. a vegetable ash such as rice shell ash. The filler material is pref. expanded vermiculite and/or perlite.

The mixture is pressed in a mould to reduce the volume to 20-80, pref. 30-50% of the starting volume using a pressure of 1-4 bar.

The mould is preheated to 40-250, pref. 100-170°C and after pressing is removed from the mould within 3 min. It is then hardened at 40-300, pref. 100-200°C.  
(19pp1678KGDwgNo0/1).

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